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Commercial Submittal Guidelines for Non-Fast Track Permits

Non-fast track permits include new construction, additions, change of use, and alterations that are not qualified for fast track.

Submitted plans must include two complete sets of neatly bound and legible prints (suitable for electronic scanning/imaging) containing a building code analysis, general notes, technical specifications, details and floor plans drawn to scale (preferred 1/8" = 1' or ¼" = 1'). Plans shall be dimensioned, detailed and sufficiently complete to show clearly the scope of the work to be performed. Preferred plan size between 18" X 24" to 30" X 42". The original seal and signature of the responsible Maryland Licensed Registered Architect or Professional Engineer, as appropriate, must be on all drawings. Drawings shall contain, but not be limited to the following information, as applicable:

T = Townhouse (Commercial) C = Commercial Buildings

A. Site Plan(s)		
-Vicinity map, north arrow, date and scale (preferred 1' = 30').	T	C
-Property lines with bearings and distances.	T	C
-Lot or parcel numbers, block number and record plat or deed reference.	T	C
-Existing topography and proposed grading at contour intervals of not more than two feet.	T	C
-Bodies of water, water courses and 100-year floodplains.	T	C
-Vegetative cover/landfills.	T	C
-Locations and names of existing or proposed highways and streets serving the site, showing center-lines, widths of paving, grades, median break points and right-of-way lines.	T	C
-Location, height, area and use of all structures.	T	C
-Front, side and rear yard setbacks.	T	C
-Location of underground fuel storage tanks/etc.	T	C
-Location of recreational areas, green areas and other open spaces.	T	C
-Calculations of building height, building lot coverage, density, green area and parking calculation.	T	C
-Location and dimensions of all driveways, parking facilities, handicapped parking and building access*, loading areas, directional traffic controls, points of access to surrounding streets, walkways and location of required fire and rescue vehicle access lanes, noting material, load rating, width, overhead clearance, etc.	T	C
-Location of all sewer, water and storm drainage lines, well and septic systems and all easements and rights-of-way.	T	C
-Landscape plan for parking facility showing all man-made features and the location, size, and species of all plant material.	T	C

-Fire hydrant locations within 400' of the building, sizes of all water mains feeding fire hydrants and buildings, and static pressure (if known), along with WSSC contract number and estimated date of completion (if applicable).	T	C
-Building handicap access shall be noted on the site plans unobstructed from parking to the building, including details of curb cuts, ramps, sidewalks, etc.	C	
-Parking spaces count analysis.	T	C

Architectural Plans		
-Name and address of project.	T	C
-Names, addresses and telephone numbers of owner(s), architect(s) and consultants(s).	T	C
-Index of drawings.	T	C
-List of material symbols used on drawings.	T	C
-List of all applicable codes used for the design of the project.	T	C
-Code analysis must be based on the International Building Code (IBC) and the Life Safety Code (NFPA 101) and shall include: (a) proposed Use Group and occupancy; mixed use analysis (identify if separated or non-separated uses); type of construction, height, number of stories and areas per floor (actual and allowable); design live loads per floor; special use and occupancy (actual and allowable); design live loads per floor; special use and occupancy conditions; exit analysis; occupancy calculations; tabulation of required fire-resistance ratings for various structural elements and/or assemblies (including test numbers and specifications). (b) For additions, change of use and alterations follow the same as listed in "(a)" and include the code analysis of the existing building.	T	C
-Title Block requirements statement.	T	C
-Scope of work (description of work being done)	T	C
-Scaled and dimensioned foundation and floor plans showing the use of all spaces/rooms and means of egress arrangement.	T	C
-Scaled and dimensioned plans of handicap accessibility, facilities and fixtures.	C	
-Scaled reflected ceiling plans	T	C
-Clear indication of firewall locations and ratings, and Use Group separations and ratings. Include listed/approved design number used.	T	C
-Scaled roof plans clearly showing all openings.	T	C
-Building exterior elevations, showing all openings.	T	C
-Building interior elevations, as appropriate.	T	C
-Complete sections and details for stairways, ramps (including the guards and hand rails with all dimensions shown), foundations, floors, walls and roofs. All details shall be properly cross-referenced.	T	C
-Windows and door schedules including the hardware type and description.	T	C
-Room finish schedule.	T	C
-Location and ratings of vertical shafts, flues, etc.	T	C
-Wall legend of new and existing.	T	C
-Detailed fire rating of all exit stairs and shaft enclosures.	T	C
-Industrialized buildings (trailers) must have a Maryland State certification letter for the intended use. A code analysis and all other site conditions related to the trailer, must be sealed and signed by a Maryland Licensed Registered Architect or Professional Engineer.		C

Structural Plans

I. NEW CONSTRUCTION

A. DRAWINGS (As Applicable) T C

1. Scale: Minimum 1/8.
2. Foundation plans, sections and details.
3. Sheeting and shoring plans, sections and details.
4. Site specific underpinning details.
5. Retaining walls and details.
6. Soil strengthening methods, plans and details.
7. Floor framing plans, sections and details.
8. Roof framing plans, sections and details.
9. Beam (concrete structures), column and foundation schedules.
10. Lateral load resisting elements, schedules and details.
11. Structural notes and specifications.

Drawings of building components, not designed by the structural engineer of record, shall be reviewed and approved by the SER for conformance to the design of the building prior to submittal to the County for permit, review or record. IBC Section 107.3.4.1.

A separate permit is required for foundation components such as soil strengthening methods (dynamic compaction, aggregate piers etc.), support of excavation (sheeting and shoring) and underpinning, unless the delegate engineer's design, reviewed and approved by the structural engineer of record, is included in the building application package.

B. DOCUMENTS

1. Geotechnical Investigation Report.
2. Building Specifications.
3. Structural evaluation (computations) of existing roofs, to sustain drifting loads caused by higher roofs constructed within twenty (20) feet.

C. DESIGN LOAD CRITERIA (IBC 2015)

Structural design information required to be indicated on structural drawings:

1. Floor live loads. (Section 1603.1.1) T C
2. Roof live loads. (Section 1603.1.2). Minimum roof live load is 30psf. (County amendment) T C
3. Roof snow loads (Section 1603.1.3). Parameters and coefficients shall be shown on drawings: T C
   a. Ground snow load, P_g. Ground snow load P_g = 30 psf. (County amendment)
   b. Flat-roof snow load, P_f.
   c. Snow exposure factor, C_e.
   d. Snow importance factor, Is.
   e. Thermal factor, C_t.
   f. Drift surcharge loads(s), Pd, where the sum of Pd and Pf exceeds 20psf.
   g. Width of snow drift(s), w.
4. Wind design data. (Section 1603.1.4). Parameters and coefficients required to be shown on drawings: T C
   a. Ultimate design wind speed, V_{ult},(3-second gust), miles per hour and nominal design wind speed, V_{asd}, as determined in accordance with section 1609.3.1 of IBC 2015. Ultimate design wind speed, V_{ult}, (3-second gust), miles per hour for risk categories I, II, III and IV are 105, 115, 120 and 120 respectively. (County amendment)
   b. Risk Category.
   c. Wind exposure. Applicable wind direction if more than one wind exposure is utilized.
   d. Applicable internal pressure coefficient.
   e. Design wind pressure for the main wind force-resisting system.
   f. Design wind pressures to be used for exterior component and cladding materials not specifically

designed by the registered design professional responsible for the design of the structure, psf.

5. Earthquake design data. (Section 1603.1.5).
   Parameters and coefficients required to be shown on drawings: T C
   a. Risk category.
   b. Seismic importance factor, I_e.
   c. Mapped spectral response accelerations S_s and S_1. Spectral response accelerations for short period and one second shall be S_s=12.5% and S_1=5.5%. (County amendment)
   d. Site class.
   e. Design spectral response acceleration parameters, S_{ds} and S_{d1}.
   f. Seismic design category.
   g. Basic seismic force-resisting system(s).
   h. Design base shear(s).
   i. Seismic response coefficient(s), C_s.
   j. Response modification factor(s), R.
   k. Analysis procedure used.
6. Geotechnical information. (Section 1603.1.6) T C
7. Flood design data. (Section 1603.1.7) T C
8. Special loads. (Section 1603.1.8)
9. Nonstructural Components and Designated Seismic Systems requiring special inspection. (Sections 1705.13.2 and 1705.13.3)
10. Photovoltaic panel systems. (Section 1603.1.8.1)
10. Rain loads. (Section 1611) T C
11. Fire truck loading. Structural members subject to fire truck loading shall be designed for the concentrated loads applied by the vehicle to the structure as described below:
    The maximum fire truck operating weight is 85000 lbs distributed in three axles spaced 19'- 6" and 4'-6" apart. The transverse wheel distance is 8'-2". The front axle weighs 23000 lbs and the two rear axles 31000 lbs each. When the ladder is up the vehicle is raised and supported on four (4) outriggers spaced 10'-0" apart along the length of the vehicle and 16'-0" apart in the transverse direction. Depending upon the position of the ladder any pair of two front, side or rear outriggers apply to the structure a force of 123,552 lbs (61,776lbs/outrigger in accordance with NFPA 1901 chapter 19.21.4.2) and the remaining two a force of zero (0) lbs. Outrigger pad dimensions are 2'-2" wide by 2'-6" long (County amendment). The requirements of IBC section 1607.7.2 shall also be met.
12. Applicable load criteria for design work delegated to the contractor.

D. DESIGN LOAD CRITERIA FOR BUILDINGS CONSTRUCTED IN ACCORDANCE WITH THE CONVENTIONAL LIGHT FRAME CONSTRUCTION OF SECTION 2308 (IBC 2015) T C
   Structural design information required to be indicated on structural drawings:
   a. Floor and roof live loads.
   b. Ground snow load, P_g.
   c. Ultimate design wind speed, V_{ult}, (3-second gust), miles per hour (mph) and nominal design wind speed, V_{asd}, as determined in accordance with section 1609.3.1 of IBC 2015 and wind exposure.
   d. Seismic design category and site class.
   e. Flood design data, if located in flood hazard areas as established in section 1612.3. of IBC 2015
   f. Design load-bearing values of soils.

II. EXISTING CONSTRUCTION / TENANT MODIFICATIONS

The Structural Engineer's drawing submittals, as a minimum shall include the following, as applicable:

1. Description of the existing structural framing.
2. Dead, live and snow load assumptions and the weight of all new mechanical units.
3. Weight of new photovoltaic panel systems. A note on the drawings shall verify that the requirements of IBC Sections 1607.12.5 and 1613.6, if applicable, are met.
4. Computations and details showing the required reinforcing of existing structural members and stiffening of the structural system supporting:

a. New roof top mechanical units and the method of attachment to the structure.
b. New floor supported mechanical units.
c. Water heaters.
d. Operable partitions.
e. Structural members in file and computer rooms.
f. Structural members in change of use areas requiring higher live loads.

5. Computations to indicate that stresses in existing structural elements will not increase more than 5% due to new gravity loads.
6. Computations to indicate that stresses in members of the lateral force resisting system will not increase more than 10% due to vertical or horizontal additions to an existing structure.
7. Notes on the drawings requesting verification of all soil related design assumptions, by a geotechnical engineer registered in Maryland, prior to commencement of construction.

III. INDUSTRIALIZED / MODULAR BUILDINGS

The submittal as a minimum shall include the following:

1. Minimum design loads for Industrialized/Modular Buildings shall meet the requirements of Maryland Department of Housing and Community Development (DHCD) dated November 18, 2011, based on the 2012 International Building Code (IBC) and International Residential Code (IRC).
2. COMAR 05.02.04.09A states: Approved models shall be accepted by the local enforcement agency as approved for the purpose of granting an installation permit when the design loads are safe for the locality as determined by the local enforcement agency. On site construction, e.g. exterior stairs, ramps, decks, foundation, frost depth and design loads shall conform to Montgomery County Codes and Regulations as amended.
3. The modular unit foundation shall be designed by an engineer registered in the state of Maryland. His/her design shall be based on soil properties applicable to the site. Signed and sealed computations shall be submitted for review with the application.
4. Anchorage of the modular unit to the ground shall be site specific and designed to support the anchorage forces specified by the unit manufacturer. Specify type, number and embedded length of anchors to be used. Anchorage signed and sealed computations by an engineer registered in Maryland shall be submitted for review with the application.

IV. DEMOLITION OF EXISTING STRUCTURES

Construction documents and a schedule of demolition shall be submitted where required by the building official. Where such information is required, work shall not be done until such construction documents or schedule, or both, are approved (IBC 2015, 3303.1).

The structural demolition work shall be designed by a specialty engineer registered in the state of Maryland. A signed and sealed copy of the demolition work and shoring of the existing structure, reviewed and approved by the structural engineer of record, shall be kept at the site at all times for the inspector to review.

Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by the registered design professional (IBC 2015, Section 107.1).

V. FREE-STANDING SIGNS

The submittal as a minimum shall include the following:

1. Dimensional cut sheet of the free-standing sign.
2. Structural notes. The notes shall include applicable code and referenced standards. Material properties and grades of materials used. Wind and earthquake loads utilized in the design of the sign supporting structure and its foundation.
3. Soil parameters utilized in the foundation design.
4. Computations for the sign support framing and foundation design.
5. Structural sections and details showing attachment of the sign support structure to the foundation,

column base details and the required depth and reinforcing of the foundation.

VI. FENCES

The submittal as a minimum shall include the following:

1. Drawing showing fence plan layout, fence support framing and foundation.
2. Structural notes. The notes shall include applicable code and referenced standards. Material properties and grades of materials used. Wind load utilized in the design of the fence structure and its foundation.
3. Soil parameters utilized in the foundation design.
4. Structural sections and details showing attachment of the fence support structure to the foundation, column / post base details and the required depth and reinforcing of the foundation.
5. Notes on the drawings requesting verification of all soil related design assumptions, by a geotechnical engineer registered in Maryland, prior to commencement of construction.

VII. PHOTOVOLTAIC PANEL SYSTEMS

All photovoltaic systems shall comply with NFPA 1, Fire Code, for photovoltaic systems

A. EXISTING ROOFS

The County requirement (Executive Regulation 08.00.02.63) of LL=30psf on roofs will NOT apply under photovoltaic panels installed twenty-four (24) inches or less from roof top. The requirements of IBC Section 1607.12.5.1 shall apply. The County requirement of minimum unreducible roof live load of 30psf shall apply outside the photovoltaic panel footprint.

The submittal as a minimum shall include the following:

1. Existing roof framing plan and method of attachment of the solar panel support framing to the roof structure.
2. Structural notes. The notes shall include applicable code and referenced standards. Material properties and grades of materials used. Design dead and live loads including ballast weight (if used).
3. Computations to indicate that stresses in existing structural elements will not increase more than 5% due to photovoltaic panel loads.
4. Structural sections and details.

B. NEW CONSTRUCTION

The minimum unreducible roof live load of 30psf required by the County (Executive Regulation 08.00.02.63), shall apply throughout the roof, even in the areas to be covered by photovoltaic panels installed twenty-four (24) inches or less from roof top. The photovoltaic panels are not permanent structures and can be either removed or replaced with a different system by the building owners.

C. PHOTOVOLTAIC PANELS INSTALLED AS INDEPENDENT STRUCTURES.

Photovoltaic panels or modules that are designed to span to structural supports and have accessible/occupied space underneath shall be designed for the minimum unreducible roof live load LL=30psf required by the County (Executive Regulation 08.00.02.63) in combination with other applicable loads.

The submittal as a minimum shall include the following:

1. Roof framing plan and method of attachment of the solar panels to the roof structure.
2. Structural notes. The notes shall include applicable code and referenced standards. Material properties and grades of materials used. Design dead and live loads. Wind and earthquake loads utilized in the design of the supporting structure and its foundation.
3. Structural sections and details.
4. Foundation plan and details.
5. Soil assumptions utilized in the foundation design of the structure(s).

6. Notes on the drawings requesting verification of all soil related assumptions, by a geotechnical engineer registered in Maryland, prior to commencement of construction.

If the permit application is for the installation of solar panels in an open field, then the applicant shall submit a letter to the County stating that the area under the structures supporting the photovoltaic panel or modules is restricted to the public. The minimum unreducible roof live load LL-30psf required by the County (Executive Regulation 08.00.02.63) will NOT apply. All other loads and combinations in accordance with IBC Section 1605 shall be accommodated.

Electrical Plans

- Electrical site plan, including area lighting and services(s) provided, loads and design calculations.	T	C
-Scaled floor plans and reflected ceiling plans indicating lighting and power, wiring diagrams, location of fixtures, outlets and equipment, clear indication of fixtures on emergency circuits or independent power source and exit light markings.	T	C
-Emergency generating equipment.	C	
-Electrical power riser diagram.	T	C
-Ground fault protection.	T	C
-Grounding.	T	C
-Fire alarm riser diagram.		C
-List of electrical symbols used on drawings.	T	C
-Schedule for fixtures.	C	
-Schedule for panels, switchboard.	C	
-Schedule for transformers.	C	
-Electrical load calculations.	C	
-Smoke detector locations.	T	C

Mechanical Plans

-Energy conservation analysis/computations based on the Intl. Energy Conservation Code-2012.	T	C
-Clear indication of type of heating equipment (oil, gas, electric, etc.) and corresponding fuel distribution lines.	T	C
-Clear indication of fuel and its distribution for generators.	C	
-Reflected ceiling plans, roof plans and elevations or sections, indicating size and location of duct work, piping, grilles, fire dampers, etc.	T	C
-Location and size of air handling equipment and plenums.	T	C
-Location and size of boilers, chillers and cooling towers.	C	
-Location of exhaust equipment and associated ducts and fire dampers.	T	C
-Location of unit heaters, ventilators, rooftop units, heat pumps, duct heaters, etc.	T	C
-Clear indication of any smoke control system.		C
-Equipment schedule and details.	T	C
-List of mechanical symbols used on drawings.	T	C
-Commercial kitchen hood details and associated ducts and roof exhaust locations.	C	

Application Submittal Package

1. Application for Commercial Building Permit must be accompanied by a non-refundable filing fee.
2. Application for Use & Occupancy Certificate must have a site plan showing parking tabulations, a copy of Special Exception (if applicable) and a non-refundable filing fee. (See Use & Occupancy information sheet)
3. Application for Stormwater Management/Sediment Control.
4. Application for Montgomery County and/or Maryland State Highway Administration (SHA), for construction of property dedicated to public use (driveway apron). Provide street address, subdivision name, lot, block

or parcel. In most cases, a bond will be required; you will be notified of the amount. For state highways, please contact State Highway Administration at 301-333-1350.

5. Application for a Well and/or a Septic must be submitted, if property is on well and/or septic. Additional information pertaining to this type of application, please call 311 in Montgomery County or 240-777-0311 outside Montgomery County.
6. Energy Calculations.
7. Three supplemental sets of site and landscape plans (5 total). **NOTE:** If building is on well and septic, four supplemental sets of site development plans (6 total) are required.
8. If connecting to public water and/or sewer, the original (pink) copy of the plumbing permit will be required prior to the issuance of a building permit.
9. If applying for construction of public facilities (restaurants, community swimming pools, etc.), contact the Montgomery County Health Department at 311 in Montgomery County or 240-777-0311 outside Montgomery County regarding approval. Written approval must be submitted to this office prior to issuance of a building permit.

NOTE: IF THE PROPERTY FOR WHICH THE PERMIT IS TO BE ISSUED IS LOCATED WITHIN:

BROOKEVILLE	**MONTGOMERY VILLAGE**	**BARNESVILLE**	**POOLESVILLE**
CHURCHHILL TOWN	**WASHINGTON GROVE**	**LAYTONSVLLE**	

WRITTEN PROOF OF APPROVAL FROM THAT JURISDICTION MUST BE FORWARDED TO THIS OFFICE PRIOR TO ISSUANCE OF A PERMIT.

NOTE: Stormwater Management and Sediment Control applications must be submitted prior to applying for building permit, (please call 311 in Montgomery County or 240-777-0311 outside Montgomery County for additional information).